Figure III.4: The fundamental vectors of the Phong lighting model. The surface normal is the unit vector $\mathbf{n}$. The point light source is in the direction of the unit vector $\mathbf{l}$. The viewpoint (eye) is in the direction of the unit vector $\mathbf{v}$. The vectors $\mathbf{l}$, $\mathbf{n}$ and $\mathbf{v}$ are not necessarily coplanar.